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SMITH-HILL AND BEDELL, P.C.
16100 NW CORNELL ROAD, SUITE 220
BEAVERTON, OR 97006

EXAMINER	
LYNCH, PATRICK D	

ART UNIT	PAPER NUMBER
4155	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/598,162	SNYDERS, MARK	
	Examiner	Art Unit	
	PATRICK D. LYNCH	4155	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *11-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *11-17,19 and 20* is/are rejected.

7)☒ Claim(s) *18* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *18 August 2006* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *08/18/2006*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. The examiner notes applicant's preliminary amendment canceling claims 1-10 and adding claims 11-20. Claims 11-20 are now pending.

Specification

2. Claim 19 is objected to because of the following informalities: in the fourth line of the claim the word "been" appears misspelled. It appears as though "been" should read, "being". Appropriate correction is required.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reese (US 6,305,394) in view of Pearlstine (US 3,489,157) and Glatz et al. (US 4,586,525).

5. Regarding claim 11, Reese discloses an up-and-over screen assembly (The sunshade of Reese travels upward and extends over an area and is therefore considered an up and over sunshade) having at least one upright track ("main mast" 22 in Fig. 1 provides an upright track) for a traveler ("collar" 26, Fig. 1), a stably-supported screen ("canopy" 102, "ribs" 62, and "boom" 24 in Fig. 1 make up the screen) and fixed at one side to the traveler (Fig. 1 clearly shows the screen fixed at the end of "boom" 24 to "collar" 26) which is moveable up and down the

track (Col. 4, lines 30-31, "The sliding mast clamp 26's position on the main mast 22 can thus be adjusted by moving it up or down on the mast…") respectively to raise and lower the screen through ninety degrees or more (The screen traverses 90 degrees from its horizontally extended position, shown in Fig. 2, to its vertical storage position, shown in Fig. 4) between a lowered upright position alongside the track (Fig. 4) and a raised position at which the screen extends transversely from the track (Fig. 2) to shield a chosen ground area adjacent the track from a particular ambient condition, a rigid link ("support strut" 68, Fig. 2) rotating at its ends about first and second parallel horizontal axes to guide movement of the screen between its raised and lowered positions (As is clear from Fig. 2, "support strut" 68 rotates about a first horizontal axis at "collar" 70, and about a second horizontal axis at "collar" 88, which is labeled in Fig. 1. These rotational axes guide the movement of the shade.), the first pivotal axis being fixed in relation to the upper-end of the track (Fig. 2 clearly shows that "collar" 70 is fixed to the upper end of "main mast" 22, considered the track.) and the second pivotal axis being fixed in relation to the screen (Fig. 1 shows that "collar" 88 is fixed to the "boom" 24, which is considered part of the shade.).

6. Reese does not expressly disclose that there are at least two rigid links having rotational ends as discussed above, or a device positionally fixed in relation to the screen assembly and for absorbing unwanted forces which would otherwise act on the traveler to cause the screen to become unstable when raised through approximately 90 degrees or more.

7. Pearlstine, however, discloses a beach umbrella (Title) structure that includes crank ("handle" 32, Fig. 1) and pulley system ("pulley" 36 and "cord" 34, Fig. 2) to move a "collar" 20 that is analogous to the collar of Reese. The umbrella further includes a device ("spring" 68, Fig. 3), positionally fixed in relation to the screen assembly (Col. 3, lines 2-4, "The other end of the coil spring 68 is anchored to the upper support portion 18 by means of a screw.") for absorbing unwanted forces which would otherwise act on the traveler to cause the screen to become unstable when raised through approximately 90 degrees or more; The spring becomes compressed when the collar is raised, thus creating a compression force which opposes and absorbs unwanted vibrations which would otherwise act on the collar. The spring is necessary with a pulley system since it prevents the occurrence of slack in the cord which may arise from external forces.). This umbrella system provides an easier method of expanding the canopy, without requiring a user to physically push the collar to a height which he or she may have difficulty reaching.
8. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the screen assembly of Reese by using a pulley system and crank, as well as a spring for absorbing vibrations, similar to that of Pearlstine. This modification would be beneficial since it makes extending a shielding canopy from a retracted position significantly easier since the umbrella user need not physically push the collar to the proper height, a height which may be out of reach of a smaller user. Furthermore, the spring reduces vibrations of the canopy which may be caused by wind or other external forces.

9. Thus, Reese as modified by Pearlstine teaches the claimed invention except that there is only a single rigid link instead of at least two rigid links. Glatz et al., shows that the use of two rigid links is an equivalent structure known in the art ("parallel struts" 14, Figs. 1 and 2). Therefore, because these two support means were art recognized equivalents at the time the invention was made, one of ordinary skill in the art would have found it obvious to substitute two links for a single link. Furthermore, having two links provides greater support for the shade and makes assembly of the pivots easier since intermediate brackets are not needed.
10. Regarding claim 12, Reese as modified by Pearlstine and Glatz et al. discloses that the device provides a resilient bias (The device, added in the modification of Reese by Pearlstine, is a spring and thus inherently provides a resilient bias.).
11. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Reese (US 6,305,394) in view of Pearlstine (US 3,489,157) and Glatz et al. (US 4,586,525), as applied to claim 11 above, and further in view of Martin (US 5,655,557).
12. Reese as modified by Pearlstine and Glatz et al. discloses a screen assembly having all of the structure of claims 11 and 12, upon which claim 13 is dependent, as set forth above.
13. Reese as modified by Pearlstine and Glatz et al. does not expressly disclose that the resilient bias is adjustable and provided by a gas strut.
14. Martin, however, shows that a gas strut is an equivalent structure known in the art (Col. 4, lines 38-41, "While the energy absorbing and dissipating means preferred

is an elastic cord 90, and such means, for example, a spring or pneumatic or hydraulic cylinder, may be employed."). Therefore because a resilient coil spring and a gas strut were art-recognized equivalents at the time the invention was made, one of ordinary skill in the art would have found it obvious to substitute a gas strut for a coil spring.

15. The examiner further takes Official Notice that an adjustable resilient bias is so well known that it would have been obvious to one having ordinary skill in the art to incorporate an adjustable bias such that the user could alter the amount of force needed to fully extend the screen.

16. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Reese (US 6,305,394) in view of Pearlstine (US 3,489,157), Glatz et al. (US 4,586,525), and Martin (US 5,655,557), as applied to claim 13 above, and further in view of Vennik (US 5,116,258).

17. Reese as modified by Pearlstine, Glatz et al., and Martin discloses a screen assembly having all of the structure of claim 13, upon which claim 14 is dependent, as set forth above.

18. Reese as modified by Pearlstine, Glatz et al., and Martin does not expressly disclose that the gas strut is associated with a track containing a carriage having a part which extends laterally from the track to provide the lower end of a traveler which is pivotally attached to a lower part of the screen.

19. Vennik, however, discloses a similar collapsible umbrella (Title; See Fig. 1) where a main mast (“standard” 15, Fig. 1) is provided with a track (“slot” 17, Fig. 1)

containing a carriage ("slide member" 19, Fig. 3) having a part which extends laterally from the track ("bracket" 18, Fig. 3, is part of "slide member" 19 and extends from "slot" 17) to provide the lower end of a traveler which is pivotally attached to the screen (Fig. 3 shows that the "traveler" 18 has pivoted at "pivot" 20 to the screen support.). This configuration allows the slide parts to be contained within the support mast, thus decreasing the overall size of the assembly and increasing the aesthetic appeal of the umbrella.

20. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the screen assembly of Reese as modified by Pearlstine, Glatz et al., and Martin by utilizing a configuration similar to Vennik, including a track containing a carriage having a part extending from the track to provide the lower end of a traveler. This modification would be beneficial since it allows the slide parts to be contained within the support mast, thus decreasing the overall size of the assembly and increasing the aesthetic appeal of the umbrella. The examiner notes that in adapting a similar mechanism to the screen of Reese, the traveler would be pivoted to a lower part of the screen as is already the case in the assembly of Reese (See Fig. 2 of Reese).

21. Claims 15 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reese (US 6,305,394) in view of Pearlstine (US 3,489,157) and Glatz et al. (US 4,586,525), as applied to claim 11 above, and further in view of Glatz (US 5,785,069).

22. Regarding both claims 15 and 16, Reese as modified by Pearlstine and Glatz et al. discloses a screen assembly having al of the structure of claim 11, upon which claim 15 is dependent, as set forth above.

23. Reese as modified by Pearlstine and Glatz et al. further discloses a drive source (Pearlstine, “handle” 32, Fig. 1; The handle was added in the modification of Reese by Pearlstine regarding claim 1 above.) and a pulley (Pearlstine, “pulley” 36, Fig. 2) controlling the tension of an inextensible cable loop (“cord” 34, Fig. 2) which controls the position of the traveler on the track (See discussion of the modification of Reese by Pearlstine above regarding claim 1 for the function of the crank and pulley system used to modify Reese.).

24. Reese as modified by Pearlstine and Glatz et al. does not expressly disclose a drive-transmission mechanism mounted between the drive source and pulley controlling the tension of an inextensible cable loop which controls the position of the traveler on the track, the drive transmission mechanism having a drive ratio which is sufficiently large to prevent the reversal of drive through it so that unwanted forces which might otherwise render the screen unstable when in its elevated position are absorbed, or an electric motor to move the traveller up and down the track.

25. Glatz, however, discloses a similar pulley system (See Fig. 3) for controlling the extension of an umbrella in a manner similar to that of Reese (As is clear from Fig. 1 and Fig. 2), which includes an electric motor as the drive source ("motor" 104, Fig. 3) and a transmission mechanism between the motor and the drive source

("drive" 102, Fig. 3), the drive mechanism having a drive ratio which is sufficiently large to prevent the reversal of drive through it (Col. 6, lines 16-18, "The thread of the spindle (100) and/or the drive (102) can also be so formed that they are self-retarding, so that a brake mechanism is not necessary." Thus if a brake mechanism is not necessary because of the manner in which the drive is designed, it must have a drive ratio sufficient to prevent back drive.). This configuration allows the umbrella to be extended with minimal physical exertion and eliminates the need for a brake thus reducing the steps in extending the umbrella.

26. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the screen assembly of Reese as modified by Pearlstine and Glatz et al. by including using an electric motor to move the collar up and down the track and a drive-transmission mechanism designed such that no brake is needed, i.e. by having a sufficient drive ratio to prevent back drive, similar to the configuration of Glatz. This modification would be beneficial since it allows the screen to be extended to its use position with minimal physical exertion and eliminates the need for a brake, thus reducing the steps in extending the screen.

27. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Reese (US 6,305,394) in view of Pearlstine (US 3,489,157) and Glatz et al. (US 4,586,525), as applied to claim 11 above, and further in view of Harbaugh (US 5,937,882).

28. Reese in view of Pearlstine and Glatz et al. discloses a screen assembly including all of the structure of claim 11, upon which claim 17 is dependent, as set forth above.

29. Reese in view of Pearlstine and Glatz et al. does not expressly disclose that a latch mechanism having one component on the screen and a second component fixed in relation to the track is engaged when the screen is moved towards an upright stowage position alongside the track, the latch mechanism being effective to positively locate an upper end-portion of the screen at a position alongside the track, and the pivotal axis at the upper-end of the link associated with the screen being positioned nearer the track with respect to the pivotal axis at the lower end of the link to ensure that the link slopes downwardly slightly away from the track when the screen is in its vertical stowage position.

30. Reese as modified by Pearlstine and Glatz et al. does, however, disclose that when in collapsed position an upper end-portion of the screen is located at a position alongside the track (See Fig. 3, the entire canopy portion is located along side the “main mast” 22) and the pivotal axis at the upper end of the screen is positioned nearer the track with respect to the pivotal axis at the lower end of the link to ensure that that the link slopes downwardly slightly away from the track when the screen is in its vertical stowage position (See Fig. 4; The space between the “main mast” 22 and the “support strut” 68, unlabeled in the figure, gets larger further towards the lower pivot point.)

31. Furthermore, Harbaugh discloses a similar umbrella assembly where a tie component holds the umbrella in its collapsed configuration. This prevents the umbrella from opening undesirably.

32. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the screen assembly of Reese as modified by Pearlstine and Glatz et al. by including a tie component, similar to that of Harbaugh. This modification would be beneficial since it would hold the screen in its collapsed state, thus preventing undesired extension of the screen.

33. Thus, Reese as modified by Pearlstine, Glatz et al., and Harbaugh discloses the claimed invention except that a tie component is used instead of a latch mechanism having one component on the screen and a second component fixed in relation to the track. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use a latch mechanism having one component on the screen and a second component fixed in relation to the track since the examiner takes Official Notice of the equivalence of a latch and a tie component for their use in holding a canopy screen in its collapsed position and the selection of any of these known equivalents to hold a screen in its collapsed state would be within the level of ordinary skill in the art.

34. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Reese (US 6,305,394) in view of Pearlstine (US 3,489,157) and Glatz et al. (US 4,586,525), as applied to claim 11 above, and further in view of Lin (US 5,927,310), Cheng (US 6,397,871), and Burns (3,479,667).

35. Reese in view of Pearlstine and Glatz et al. discloses a screen assembly including all of the structure of claim 11, upon which claim 19 is dependent, as set forth above.

36. Reese in view of Pearlstine and Glatz et al. does not expressly disclose that the screen is supported by travelers respectively arranged in a line of spaced upright parallel tracks mounted on a wall, each traveler being provided with its own device and being vertically positioned on its track by a cable, a drive common to the cables being used to move the travelers in synchronism along their respective tracks.

37. Reese as modified by Pearlstine and Glatz et al. does, however, disclose the traveler being provided with its own device and being vertically positioned on its track by a cable (See discussion of claim 1 above).

38. Lin discloses a sunshade of similar construction which has two or more masts such that it can hold up a larger sized shade (See Fig. 6).

39. Cheng shows that it is well known in the art to secure a sunshade directly to the wall (As in Fig. 2) or to a free standing mast for support (As in Fig. 6). By securing the sunshade directly to the wall, the amount of floor space needed is significantly reduced or eliminated altogether.

40. Furthermore, Burns teaches the use of a common drive to actuate two sides of a canopy lifting device (See Fig. 1; “Actuating means” 102 drives both “arms” 52 to lift the canopy). This ensures that the canopy is lifted uniformly and reduces cost by eliminating the need for two actuators.

41. It would have been obvious to one of ordinary skill in the art at the time the invention was made to further modify the screen assembly of Reese as modified by Pearlstine and Glatz et al. by including more than one track, similar to the multiple masts of Lin, attaching the tracks directly to a wall, similar to the configuration of Cheng, and using a single drive common to both tracks, similar to the canopy lifting mechanism of Burns. The multiple tracks would be beneficial since it would allow support for a much larger sized screen, the attachment directly to a wall would allow for minimization of the floor space needed to support a screen, and the single drive mechanism would ensure uniform expansion of the screen while reducing costs by eliminating the need for two actuators.
42. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Reese (US 6,305,394) in view of Pearlstine (US 3,489,157) and Glatz et al. (US 4,586,525), as applied to claim 11 above, and further in view of Vennik (US 5,116,258).
43. Reese as modified by Pearlstine and Glatz et al. discloses a screen assembly having all of the structure of claim 11, upon which claim 20 is dependent, as set forth above.
44. Reese as modified by Pearlstine and Glatz et al. does not expressly disclose that the track is provided by the interior of a vertically slotted guide attached to one side of a pole and a second guide providing a second track is attached to the opposite side of the pole, each track having its own traveler fixed to one edge of a respective screen.

45. Vennik, however, discloses a similar collapsible umbrella (Title; See Fig. 1) the track is provided by the interior of a vertically slotted guide ("slot" 17, Fig. 1) attached to one side of a pole ("standard" 15, Fig. 1) and a second guide providing a second track is attached to the opposite side of the pole, each track having its own traveler fixed to one edge of a respective screen (As Fig. 8 shows, the collapsible umbrella assembly of Vennik can have up to four umbrellas, each with its own respective "slot" 17 with each "slot" 17 associated with its own traveler in the form of "bracket" 18, shown in Fig. 3). This configuration allows the slide parts to be contained within the support mast, thus decreasing the overall size of the assembly and increasing the aesthetic appeal of the umbrella. Furthermore, multiple umbrellas allow the assembly to shade a greater area.

46. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the screen assembly of Reese as modified by Pearlstine, Glatz et al., and Martin by utilizing a configuration similar to Vennik, including a track provided by the interior of a vertically slotted guide and a second guide on the opposite side of the pole, with each track having its own traveler fixed to one edge of a respective screen. This modification would be beneficial since it allows the slide parts to be contained within the support mast, thus decreasing the overall size of the assembly and increasing the aesthetic appeal of the umbrella. Furthermore, multiple umbrellas allow the assembly to shade a greater area.

Allowable Subject Matter

47. Claim 18 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

48. The following is a statement of reasons for the indication of allowable subject matter: The prior art shows the use of two screens provided on opposite sides of of vertical masts of spaced parallel vertical masts (As in Lin, US 5,927,310) as well as independently movable screens (As in Chen, US 6,923,193). However, there is no suggestion in the prior art that the drivers which independently move the screens are provided on a structure interconnecting the upper ends of the masts. Thus, claim 18 is seen as allowable subject matter over the prior art.

Conclusion

49. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: Steiner (US 6,588,438), Ma (US 6,321,763), Xu (US 6,196,242), Kuo (US 6,192,906), Osbron (US 1,134,635), Robertson (US 4,807,655), Liu (US 7,341,068), and Brutsaert (US 2004/0154653).

50. Any inquiry concerning this communication or earlier communications from the examiner should be directed to PATRICK D. LYNCH whose telephone number is (571)270-3736. The examiner can normally be reached on Monday-Friday, 7:30 a.m. - 5:00 p.m., EST.

51. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Victor Batson can be reached on (571) 272-6987. The fax phone

number for the organization where this application or proceeding is assigned is 571-273-8300.

52. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Victor Batson/
Victor Batson
Supervisory Patent Examnier
Art Unit 4155

PL
03/18/2008